



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,390	09/29/2005	Higashi Ko	HEI-011	3327
32628 7590 07/11/2007 KANESAKA BERNER AND PARTNERS LLP 1700 DIAGONAL RD SUITE 310 ALEXANDRIA, VA 22314-2848			EXAMINER BARLOW, MONICA L	
			ART UNIT 3609	PAPER NUMBER
			MAIL DATE 07/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/551,390		KO, HIGASHI	
	<b>Examiner</b>		<b>Art Unit</b>	
	Monica L. Barlow		3609	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/29/2005 and 11/13/2006</u>                                 | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Drawings***

1. Figure 11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

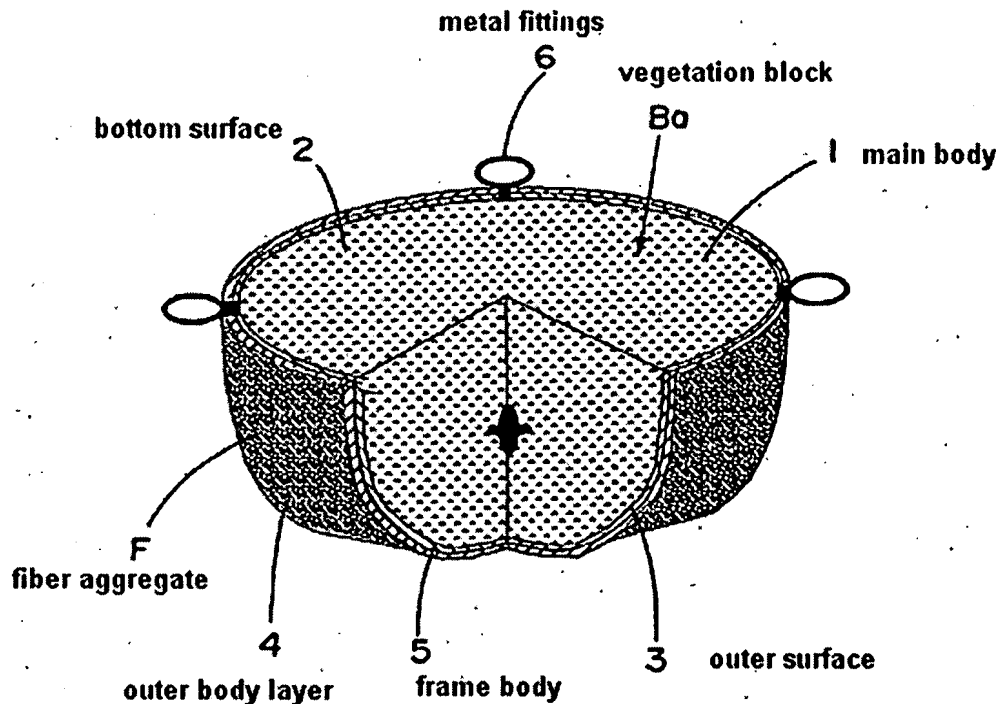
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ko (JPO 2002-220836).

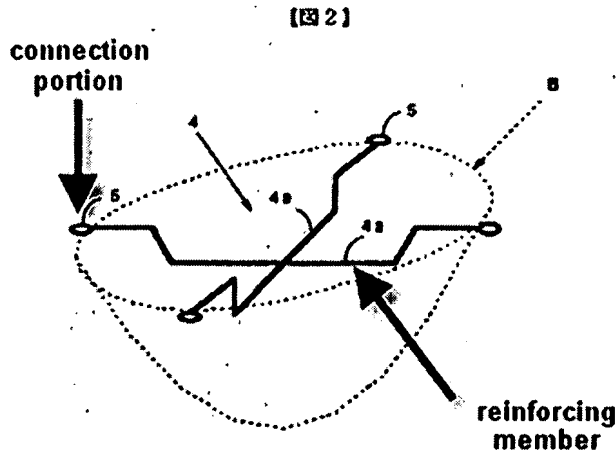
4. In re claims 1,3, and 13, with reference to modified Figure 1 shown below, Ko discloses a vegetation block with a main body formed of concrete, an outer layer of mat shaped fiber aggregate shaped similar to the outer surface of the main body.



5. Additionally, many of applicant's claims, such as claim 1, include process limitations such as "formed into a mat shape by inserting many needles..." and are therefore considered to be product-by-process claims, and the examiner notes that it has been held that even though product-by-process claims are limited by and defined by the process, determination of patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985) {see MPEP 2113}.

6. In re claims 10-12, with reference to modified Figure 2 shown below, Ko discloses a reinforcing member embedded in the block main body with a ring shaped connection portion which outwardly projects from the main body.

Art Unit: 3609



### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2,4,14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko (JPO 2002-220836) in view of Proctor (3,958,365).

9. In re claims 2 and 15, Ko discloses the claimed invention except for spraying natural rubber on the mat-shaped fiber aggregate.

10. However, with reference to col.2 lines 38-40, Proctor discloses spraying a fibrous mat for plant beds or pots with natural rubber, the advantage being to conserve soil moisture.

11. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the mat-shaped fiber

aggregate of Ko by spraying natural rubber on it as taught by Proctor in order to conserve soil moisture.

12. In re claims 4 and 14, Ko discloses the claimed invention except for mixing thermoplastic polymers in the fiber aggregate and then die-forming the mat shaped fiber aggregate while heating.

13. However, with reference to col.3 lines 44-53, Proctor discloses a fibrous mat for plant beds or pots where thermoplastic polymers have been mixed in the fiber aggregate and then die-forming the mat shaped fiber aggregate while heating. The advantage of this is to increase the rigidity and strength of the outer body layer.

14. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the outer body layer of Ko with mixing thermoplastic polymers in the fiber aggregate and then die-forming the mat shaped fiber aggregate while heating as taught by Proctor in order to increase the rigidity and strength of the outer body layer.

15. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko (JPO 2002-220836) in view of Marzolin et al (US 2002/0182334 A1).

16. In re claims 5 and 6, Ko discloses the claimed invention except for the concrete having uniform grain sizes ranging from 10nm to 25nm and a porosity set to be 10% to 25%.

17. However, with reference to [0049] and [0050], Marzolin et al disclose a permeable architectural concrete with a uniform grain size of about 15nm and a

Art Unit: 3609

porosity of about 10% to 25%. The advantage of this is to increase the permeability of water through the concrete.

18. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the concrete main body of Ko with a uniform grain size of about 15nm and a porosity of about 10% to 25% as taught by Marzolin et al in order to increase the permeability of water through the concrete.

19. Claims 7-9 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko (JPO 2002-220836) in view of Dall (5,347,753).

20. In re claims 7-9 and 16-18, Ko discloses the claimed invention except for using paper pulp as a water retainer and vegetable fibers for the fiber aggregate.

21. However, with reference to col.4 lines 35-45, Dall discloses a molded pulp container using paper pulp as a water retainer and vegetable fibers for the fiber aggregate. The advantage of this is to modify the strength, porosity, and density of the container.

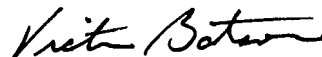
22. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the fiber aggregate of Ko with using paper pulp as a water retainer and vegetable fibers for the fiber aggregate as taught by Dall in order to modify the strength, porosity, and density of the container.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica L. Barlow whose telephone number is 571-270-3113. The examiner can normally be reached on Mon to Fri 7:30-5:00, Alternate Friday off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Batson  
Supervisory Patent Examiner  
Art Unit 3600

MB 06/13/2007